



**DECISION NOTICE AND FINDING OF NO
SIGNIFICANT IMPACT**

**ST. FRANCIS NATIONAL FOREST ECOSYSTEM
RESTORATION PROJECT**

U.S. FOREST SERVICE

OZARK-ST. FRANCIS NATIONAL FORESTS

ST. FRANCIS RANGER DISTRICT

LEE AND PHILLIPS COUNTIES, AR

DECISION

Based upon my review of the St. Francis National Forest Ecosystem Project Environmental Assessment (EA), I have decided to implement what was analyzed in the EA as the Proposed Action. The Proposed Action involves mechanical, manual, chemical and prescribed burning treatments as well as connected actions necessary to implement those treatments on the National Forest System (NFS) lands of the St. Francis National Forest (approximately 22,675 total acres). Adaptive management components are included to ensure oak regeneration is established and treatments for invasive plant species are effective. Treatments will be prescribed following completion of required inventory and survey work. The Proposed Action includes administrative actions to more closely align classifications of seed collection areas and some roads in Ozark-St. Francis National Forests' databases with levels or types of actual use, and to eliminate the need to maintain or enlarge existing wildlife openings within one-half mile of the Trail of Tears National Historic Trail.

The Proposed Action involves the following management activities, administrative actions, monitoring and related design elements:

Management Activities

The management activities described below will be prescribed individually or in combination on NFS lands of the St. Francis National Forest.

Commercial Timber Harvests

- Commercial timber harvests may be offered for sale on up to a total of 2,200 NFS acres per year.
- The harvest method (*e.g.* intermediate thinning, regeneration harvest, single or group selection harvest, salvage harvest, sanitation harvest, etc.) will be prescribed based on inventory and stand examination data, management objective (*e.g.* timber management,

wildlife habitat improvement, scenery management, and etc.) and whether the unit will be managed as even-aged or an uneven-aged.

- Loblolly pine plantations totaling 135 acres in 10 separate locations will be clear-cut and restored to desired native hardwood species.
- Harvest units shall be within ½ mile of an existing system road.
- Where damaged, merchantable timber is found, it may be removed through salvage harvests or included in green timber sale volumes.
- Trees that need to be removed for safety purposes or incidental green trees that need to be removed to facilitate management activities may be included in timber sale volumes when practical.

Purchaser Road Maintenance

- Up to five cumulative miles of system roads per year may be identified as haul roads in timber purchase contracts.
- The roads will be maintained by the respective timber purchaser(s) to Forest Service standards.

Construction of Log Landings and Skid Trails

- Log landing and skid trail locations will be dictated by topography for each sale area.
- To ensure the area will support this use and sensitive resources will not be impacted, locations of log landings and skid trails must be approved by the US Forest Service prior to installation.
- Log landings and skid trails will be obliterated after use.

Temporary Road Construction

- Up to seven cumulative miles of temporary road may be constructed each year to facilitate management activities.
 - Temporary road locations will be dictated by topography.
 - To ensure the area will support the use and sensitive resources are not impacted, temporary road locations must be approved by the US Forest Service prior to construction.
 - Temporary roads will be obliterated after use.

Road Reconstruction

- Road reconstruction to facilitate management activities may be done on up to three cumulative miles of existing system road per year.
 - Road reconstruction may involve realignment to correct drainage or erosion problems, upgrading drainage systems (ditching, culverts and water-bars, etc.), reconstruction of drainage crossings, resurfacing, repair of eroded areas, improvement of highway approaches, signing, and removal of encroaching vegetation.
 - Road reconstruction activities must be approved by appropriate US Forest Service engineering, heritage and wildlife personnel prior to implementation.

Site Preparation

- Site preparation on an average of 500 acres per year over a ten-year period will be completed following regeneration harvests or following a disturbance event.

- No more than 1,000 total acres of site preparation will be done in any year.
- Site preparation activities may be accomplished through use of hand tools, chainsaws, mechanical equipment, herbicide applications and/or prescribed burning. Trees designated for retention will not be treated.
 - For chemical site preparation, herbicides will be limited to commercial formulations of glyphosate or triclopyr amine.
 - When conducted before a regeneration harvest, chemical site preparation will involve applying herbicide directly to species ≤ 7.9 " DBH competing with oak regeneration (except federally listed or Regional Forester's sensitive listed species).
 - When conducted following a regeneration harvest or disturbance event, chemical site preparation will involve applying herbicide directly to competing species (except federally listed or Regional Forester's sensitive listed species), as well as poorly formed or severely damaged stems.

Reforestation

- Reforestation (*i.e.* planting) of desired hardwood canopy species will be done on an average of 500 acres per year over a 10-year period if needed based on monitoring as described under *Regeneration Monitoring and Adaptive Actions*. No more than 1,000 acres of reforestation will be done in any year.
- To ensure local genotypes are maintained, acorns and other seeds will be collected from the St. Francis National Forest and sent to a nursery to be grown for reforestation purposes.
 - Species planted will include, but will not be limited to, preferred oak species (*e.g.* white oak or northern red oak) within the loess slope forest community and species such as cherrybark oak, Nuttall oak or pecan in the bottomland and floodplain forest community.

Timber Stand Improvement (TSI) Activities

- TSI activities (*e.g.* release, pre-commercial thinning, non-commercial thinning, or control of understory vegetation treatments) may be implemented on an average of 1,000 acres per year over a 10-year period. No more than 2,000 acres of TSI may be done in any year with the following exception: In any one year when drier conditions will support implementation of TSI activities within the Stumpy Point tract (compartment 21), an additional 500 acres of TSI may be implemented there. This exceedance may be applied only once during the 10-year period.
- TSI activities may be accomplished through mechanical, manual, burning or chemical treatments.
 - For chemical TSI treatments, herbicides will be limited to commercial formulations of glyphosate or triclopyr amine.

Prescribed Burning

- Prescribed burning may be implemented at an average of 4,400 acres per year over a 10-year timeframe.
- Prescribed burns will be conducted in accordance with FSM 5100 (Fire Management) and the Arkansas Forestry Commission's Smoke Management Program Guidelines (<http://www.aad.arkansas.gov/arkansas-voluntary-smoke-management-guidelines>).

- Operations may be conducted in the dormant or growing season.
- Existing roads, streams and prescribed fire containment line locations from previous prescribed burns will be used as firebreaks where practicable.
- Herbicide treatment units will not be burned for at least 30 days after application. (Forest-wide Standard FW153, Forest Plan).

Mechanical Construction of Prescribed Fire Containment Line

- Up to two cumulative miles of new prescribed fire containment lines (*i.e.* those in locations not previously used as fire containment line) may be mechanically constructed per year if needed to protect property or natural resources.
- Locations of new, mechanically-constructed fire containment line will be approved by US Forest Service resource specialists prior to construction to ensure the locations are suitable and sensitive resources will not be impacted.
- Prescribed fire containment lines will be seeded after completion of a burn operation and may be maintained in an open condition through mowing or brush-hogging to facilitate implementation of repeat prescribed burns.

Mechanical Treatments to Modify Fuel Structure

- Up to 100 acres per year may receive mechanical treatments to modify fuel structure.
- Mechanical treatments could include felling woody vegetation with chainsaws, using a skid steer shredder or other equipment.
- Mechanical treatments will target areas within the Wildland Urban Interface and other areas identified by resource specialists.

Treatment of Invasive Plant Infestations with Herbicide

- Invasive plant infestations may be treated with herbicide on an average of 2,200 acres per year over a ten-year timeframe with the following exception: In any one year when drier conditions will support treating invasive plant infestations on the Stumpy Point tract (compartment 21), an additional 700 acres of invasive plant treatments may be done there. This exceedance may be applied only once during the ten-year period.
- The Ozark-St. Francis National Forests' Treatment Matrix will be used to prioritize locations and species to be treated.
- Depending on the targeted invasive plant species, prescriptions for some acres could receive more than one application in a year and may require multiple years to complete.
- Commercial formulations of one or more of the following herbicides may be used to treat invasive plant infestations: glyphosate, triclopyr (amine or ester), imazapyr, imazapic, picloram, metsulfuron, aminopyralid, or clopyralid.
- Based on efficacy monitoring results, treatment of a species of invasive plants may be adjusted as outlined under *Monitoring Efficacy of Invasive Plant Treatments and Adaptive Actions*.
- Where invasive plant infestations have been eradicated or controlled, seeding, planting or transplanting may be done if site-appropriate native vegetation does not re-establish or if needed to limit the potential for soil erosion.
 - The type of vegetation seeded, planted or transplanted will depend on season and site conditions and could include native grasses, forbs or woody species.
 - Annual grasses which do not persist more than one season may be seeded to limit the potential for soil erosion.

- Sources of native seed and plant material will originate from NFS lands to the extent possible.

Wildlife Stand Improvement Treatments

- Wildlife stand improvement (WSI) treatments will be done on an average of 500 acres per year over a 10-year timeframe. No more than 1,000 acres will be implemented in a single year.
- Den trees and trees that produce mast (hard and soft) will be favored as leave trees.
- Hand-tools, chainsaws, mechanical equipment, herbicides or prescribed burning may be used individually or in combination to implement WSI treatments.
 - For chemical WSI activities, herbicides will be limited to commercial formulations of glyphosate, triclopyr and/or imazapyr.

Wildlife Opening Management Activities

- Reconstruction, decommissioning or enlargement of existing openings or construction of new wildlife openings may be done to ensure that where other open habitats are lacking, there are at least four well-distributed 1- to 5-acre openings per square mile per Forest-Wide Standard FW34 (Forest Plan).
- Construction of new wildlife openings will only be done where existing system access roads occur.
 - Locations of new wildlife openings or of enlargements to existing wildlife openings must be approved by US Forest Service timber, wildlife, soil and heritage resource specialists prior to commencing work.
- Invasive plant infestations must be controlled in a wildlife opening and along its access before the opening will be decommissioned.
- Managed wildlife openings may be reconstructed or maintained through any or all of the following activities: burning, mowing, brush-hogging, disking, mechanical treatments (chainsaw felling, mulching, chipping or shredding), herbicide applications, applications of fertilizer or lime, use of heavy equipment, and seeding, planting, or transplanting site-appropriate grasses, herbaceous species and forbs.
 - For wildlife opening reconstruction or maintenance operations where chemical treatments are prescribed, herbicides will be limited to commercial formulations of glyphosate, triclopyr and/or imazapyr.

Erosion Repair Actions

- Recognized erosion repair practices will be conducted as needed. Activities may include shaping, smoothing, filling, draining, terracing, disking, fertilizing, liming, seeding, and mulching eroding areas or disturbed areas susceptible to erosion.

Forest Product Removal Permits

- Within 100 feet from a system road that is open to public motorized traffic, the following may be sold through forest product removal permits or removed through formal agreements:
 - Trees removed for safety purposes
 - Trees removed to facilitate management activities
 - Incidental green trees
 - Standing dead trees

- Dead and down trees and limbs
- Felled stems, limbs and brush in closed timber sale units, in completed TSI or WSI treatment units, or where mechanical treatments to modify fuel structure have been completed
- Forest product removal will not be permitted in herbicide treatment areas for at least 30 days after application (Forest-Wide standard FW22)
- Stems injected with herbicide will not be sold

Administrative Actions

Designation of a Pecan Seed Orchard

- An 11-acre stand of pecan trees occurring in compartment 15 stand 21 will be designated in the Forest's database as an orchard for seed collection.
- This action is administrative in nature and does not involve changes on the ground or affect existing use of this stand.

Designation of Seed Orchards as Administrative Sites

- Existing seed orchards located in compartment 15 stand 23 (Nuttall Oak Orchard, 13 acres) and compartment 15 stand 14 (Cherrybark Oak Orchard, 21 acres), and the 11-acre stand of pecan in compartment 15 Stand 21 will be designated as Administrative Sites in the Forest's database.
- This action does not involve changes on the ground or affect existing use of these stands.

Maintenance Level Objective Changes of System Roads

- The Maintenance Level Objectives of the following 23 system roads will be changed from Level 1 to Level 2-Administrative Access Only.
 - 1927 (2.10 miles); 97002A (0.62 mile); 97002D (0.63 mile); 97003C (0.54 mile); 97003D (0.46 mile); 97003E (0.42 mile); 97005A (0.76 mile); 97005E (0.65 mile); 97005F (0.18 mile); 97005I (0.18 mile); 97006D (0.94 mile); 97006J (0.25 mile); 97006N (0.56 mile); 97006R (0.77 mile); 97006T (0.60 mile); 97006U (0.47 mile); 97008A (0.29 mile); 97008E (0.31 mile); 97008G (1.01 miles); 97012C (0.67 mile); 97013A (0.25 mile); 97013B (1.00 mile), and 97013C (0.52 mile)
- This action does not involve changes on the ground or affect current levels of use for these roads.

Removal of Existing Wildlife Openings within One-Half Mile of the Trail of Tears National Historic Trail from the Ozark-St. Francis National Forests' Database

- Nine existing wildlife openings (WLO) within the following locations occur within one-half mile of the Trail of Tears National Historic Trail. To eliminate the need for their maintenance and the need to enlarge those that are less than 1.0 acre in size, they will be removed from the Ozark-St. Francis National Forests' database and allowed to be reclaimed by natural processes. This action is administrative in nature.
 - Compartment 15: WLO-0 in stands 3, 17 and 49 (2.14 acres); WLO-91 in stands 15 and 21 (1.52 acres); WLO-92 in stands 15 and 21 (1.85 acres); WLO-118 in stand 23 (0.05 acre); WLO-119 in stands 23 and 24 (0.16 acre); and WLO-120 in stands 24 and 32 (0.16 acre)

- Compartment 21: WLO-121 in stands 4, 7, and 22 (0.61 acre); WLO-130 in stands 12 and 19 (0.39 acre), and WLO-131 in stands 8 and 12 (0.09 acre)

Monitoring

Regeneration Monitoring and Adaptive Actions

Baseline data regarding the type and level of regeneration present will be gathered during stand inventory. Regeneration and survival surveys will be completed per the protocol outlined in FSM 2400, Chapter 2470 Section 2472.4: *Regeneration Examinations*. The minimally acceptable level of oak regeneration (*i.e.* impact threshold) is 300 oak sprouts per acre (Forest-Wide Standard FW11, Forest Plan).

First-year regeneration surveys

First-year surveys for natural regeneration will be completed 1) following closure of a regeneration timber sale and completion of site preparation activities, or 2) following a disturbance event and completion of site preparation activities. If 300 or more naturally regenerated oak sprouts per acre are present, third-year surveys will be scheduled.

If fewer than 150 naturally regenerated oak sprouts per acre are found at the first-year regeneration survey, supplemental hardwood planting (*i.e.* reforestation) to reach minimum stocking levels will be done and third-year survival studies will be scheduled.

Third-year survival surveys

If natural regeneration meets minimum required stocking levels at the third-year survival survey, a release treatment will be scheduled for year five.

If required stocking levels are not met at the third-year survival survey (natural and/or artificial), one or more of the following actions may be done, followed by inter-planting to achieve minimum required stocking levels:

- Over-story trees may be felled to create canopy gaps and increase the amount of sunlight that reaches the forest floor
- Competitor species in the mid-story may be felled, mechanically removed, or selectively treated with herbicide
- A prescribed burn may be implemented to reduce litter depth, woody debris and/or fire-intolerant competitor species

Fifth-year survival surveys will be scheduled.

Fifth-year survival surveys

If oak regeneration meets minimum required stocking levels at the fifth-year survival survey, a release treatment will be implemented.

If oak regeneration does not meet minimum required stocking levels at the fifth-year survival survey, consideration will be given as to whether another desirable native hardwood canopy

species (e.g. poplar, ash, cottonwood, sycamore, etc.) present on the site will be better suited for that location. Supplemental planting may be done if needed to achieve minimum stocking levels. A chemical treatment and/or a prescribed burn may be done to reduce competitor species on the site prior to planting.

Monitoring Efficacy of Invasive Plant Treatments and Adaptive Actions

1. Where invasive plant infestations are identified for treatment, the location, size and species will be documented and mapped.
2. Treatments will be prescribed and implemented in accordance with the most current herbicide label and Forest Plan requirements.
3. After application within the same growing season or after green-up if the application was completed near the end of a growing season, the size of the infestation will be re-mapped.
4. The impact threshold for efficacy of invasive plant treatments shall be the percent mortality achieved.
 - a. If the infestation is reduced by at least 70 percent after the initial treatment, implementation of the prescription and monitoring will continue until the infestation appears to have been eradicated.
 - i. Go to step 5.
 - b. If an infestation is not reduced by at least 70 percent after the initial treatment, the prescription will be adjusted to apply either a different herbicide approved for use with this project and labeled for use on the respective species or a tank mixture using herbicides approved for use with this project that is labeled for use on the respective species.
 - c. Return to Step 1; repeat the treatment-monitoring process until at least a 70 percent reduction in the infestation size results after an application or until all herbicides approved for use with this project that are labeled to treat the invasive species have been tried.
 - i. If all the herbicides approved for use with this project that are labeled to treat a respective invasive plant species fail to adequately control that species, a new National Environmental Policy Act (NEPA) analysis will be initiated. The new analysis will be limited to treating the invasive plant species with other herbicides.
5. Treatment units will be monitored for at least five years after an infestation appears to have been eradicated. If monitoring indicates eradication was not achieved, return to Step 1.

Design Elements

Design Elements Applicable to All Management Activities

1. Data collected through field inventory, survey, and monitoring will be used to develop or adapt prescriptions that will move NFS acres closer to desired conditions.
2. All activities will be prescribed and implemented in accordance with applicable Forest-Wide and Management Area standards identified in the 2005 Revised Ozark-St. Francis National Forests Land and Resource Management Plan (Forest Plan) and in compliance with the most current laws and agency direction.

3. “No Entry” signs will be posted to alert and inform visitors where active operations are being implemented.
4. If invasive plant infestations are present within a treatment unit or at a treatment unit’s point of access, then vehicles, equipment, shoes and clothing must be cleaned before going to another area.

Design Elements Applicable to All Activities Involving Herbicide Use

1. For all prescriptions involving the use of herbicide, a Pesticide Use Proposal (PUP, Form FS-2100-0002) will be prepared. The PUP must be approved by the Forest Pesticide Use Coordinator prior to implementation.
2. Forest Plan standards for integrated pest management (Forest Plan) will be followed.
3. Herbicide application rates, methods, mixing and restricted entry intervals shall be done in accordance with the most current herbicide label requirements.
4. “No Entry” signs identifying the herbicide applied, the application date, and the labeled Restricted Entry Interval for the herbicide applied will be posted.
5. No activities involving herbicide applications will utilize commercial formulations of glyphosate that contain the surfactant polyethoxylated tallow amine (POEA).
6. A citrus-based surfactant or a vegetable oil carrier may be used to improve efficacy.
7. Herbicide will be applied directly to target vegetation using cut surface, foliar spray, injection or basal bark application methods.
8. Herbicide will not be:
 - a. applied directly to soil
 - b. aerially broadcast
 - c. applied directly to surface water
9. A certified agency pesticide applicator will oversee herbicide operations as outlined in Forest-Wide Standards FW24 and FW25.

Design Elements for Sensitive Resources Protection

Prior to implementing any activities, Forest Service resource specialists will be consulted to identify locations of cultural, historic or other sensitive resources to be protected.

Heritage and Cultural Resources

1. The whole of the St. Francis National Forest has been inventoried for cultural resources [08-10-07-01, *St. Francis Unit Assessment* (USDA FS 2007) with State Historic Preservation Officer (SHPO) concurrence 2/8/08]. The completion of inventory for the Forest enables projects to be planned to avoid impacts to known archeological sites. A resurvey of the area is not required by the National Historic Preservation Act (NHPA). □
2. Phased identification and evaluation [36 CFR § 800.4(b)(2)] shall be used. Applicable agreements shall be followed regarding phased compliance of Section 106 of the NHPA. Each year, a planned program of work will be developed and submitted to the Zone/District Archaeologist. The planned program of work will also be provided to the SHPO and to Tribes with interest in the St. Francis National Forest.
 - a. In areas with higher probabilities of containing sites, additional testing may be conducted as annual programs of work are determined to ensure that no additional sites will be impacted. This fieldwork will be conducted in accordance with

established work standards under the supervision of the District or Forest Archaeologist. Any additional consultation and/or documentation requirements shall be concluded and/or requirements of any formal agreements shall be met prior to implementation.

3. Known historic properties that are either eligible, potentially eligible or have undetermined eligibility for listing in the National Register of Historic Places will be marked and avoided prior to implementing management actions.
4. Site protection forms shall be completed and approved by the Zone Archaeologist prior to conducting work. A copy of these forms shall also be provided to the Forest Heritage Program Manager. Nonetheless, heritage properties and their components may be undetected for a variety of reasons. Therefore:
 - a. Should any action inadvertently uncover a previously unrecorded archaeological site or object(s), work will be halted and the appropriate authorities will be notified.
 - i. Activities at that location will not resume until the resource is adequately protected and agreed-upon mitigations are implemented with SHPO and Tribal Historic Preservation Officer approvals.
5. Additional heritage surveys may be conducted following prescribed burns for US Resettlement Administration farmstead sites that were inventoried upon acquisition, and to determine if Fort St. Francis (1738-1739) may have been located within the Stumpy Point bottomland hardwood tract.
6. Management on approximately 474 NFS acres falling within one-half mile of the Trail of Tears National Historic Trail will be implemented in accordance with Regional Forester (Region 8) direction.

Federally-Listed Threatened and Endangered Species and Regional Forester's (Region 8) Sensitive-Listed Species

1. This project involves actions which span multiple years. The most current lists of federally-listed threatened and endangered species and of Regional Forester's (Region 8) sensitive-listed species known to occur or with potential to occur on the Ozark-St. Francis National Forests will be reviewed at least once annually.
 - a. All consultation requirements of the US Fish and Wildlife Service (USFWS) will be met prior to scheduling project work, and any mitigation measures required by USFWS will be incorporated and implemented.
2. For Interior Least Tern:
 - a. Prohibit logging equipment from traveling onto the St. Francis sand bar to eliminate the potential for physical damage to nests or young.
3. For Pondberry:
 - a. A biological inventory that includes search for Pondberry will be completed in all Mississippi Alluvial bottomland habitats prescribed for treatment.
 - b. If Pondberry is found, the site(s) will be protected from all activities by a 100-foot buffer unless herbicide treatments are necessary to protect Pondberry from encroachment by invasive plants, in which case:
 - i. No herbicide will be ground broadcast within 60 feet of known occurrences of this species. Selective herbicide treatments using a non-soil active herbicide may be used closer than 60 feet to protect this species from encroachment by invasive plants (Forest-Wide Standard FW28).

4. For Rafinesque's Big-Eared Bat:
 - a. All known Rafinesque big-eared bat roosts will be protected.
 - b. The following desired stand condition criteria for retention of small and large cavity den trees developed by the Lower Mississippi Valley Joint Venture Forest Resource Conservation Working Group (2007) will be applied to bottomland hardwood management prescriptions:
 - i. For small cavity trees [less than 10 inches in diameter at breast height (DBH)] retain or create at least four visible holes per acre in stems that are at least four inches DBH or at least four snag stems that are at least four inches DBH.
 - ii. For large cavity trees (greater than 10 inches DBH) retain or create at least one visible hole per 10 acres or at least two snag stems greater than or equal to 26 inches DBH.
5. For Butternut:
 - a. Search for butternut will be included as part of stand inventory.
 - b. Timber markers will be trained to identify butternut.
 - c. All known butternut trees will be protected from any treatment that could result in damage or mortality (*e.g.* cutting, herbicide application, mulching, etc.)
 - d. No herbicide will be ground broadcast within 60 feet of known occurrences of this species. Selective herbicide treatments using a non-soil active herbicide may be used closer than 60 feet to protect this species from encroachment by invasive plants (Forest-Wide Standard FW28).
6. For Bay Starvine:
 - a. Include search for Bay starvine as part of stand inventory. All known populations will be documented and locations will be recorded in the Forest's database of record.
 - b. No herbicide will be broadcast within 60 feet of known occurrences of this species. Selective herbicide treatments using a non-soil active herbicide may be used closer than 60 feet to protect this species from encroachment by invasive plants (Forest-Wide Standard FW28).
 - c. Populations of Bay starvine occurring on 10 percent of all acres to be treated in a year will be measured prior to treatment. Post-treatment monitoring will be done the year following treatment to document the effects of ecosystem restoration activities on this species.
 - i. If post-treatment monitoring indicates a monitored population is reduced by more than 10 percent, the use of growing season burning and heavy equipment will be excluded within its vicinity until the population returns to pre-treatment levels.

Design Element Applicable to the Turkey Ridge Research Natural Area

1. Within the 400-acre Turkey Ridge Research Natural Area, treatment will be limited to selective herbicide applications to control invasive plants.

Design Elements for Scenery Resource Protection

Scenery Resource Protection Along Authorized Roads

1. For all Maintenance Level Objective (MLO) 3, 4, and 5 roads and MLO 2 roads 1900I, 1904B, 1912, 1913A, 1913B, 1913C, 1915, 1917 and 1921A:
 - Within 100 feet on either side of these roads in areas with a High or Very High Scenic Integrity Objective (SIO), slash should be removed, burned, chipped or lopped to within an average of two feet of the ground when visible prior to finalizing activities.
 - In areas with a Moderate SIO, slash should be treated to within an average of four feet of the ground prior to finalizing activities.
 - Harvest units (or wildlife openings) in contiguous woodland and adjacent to these roads should be spaced no closer than 1,000 feet apart.
2. For all MLO 3, 4, and 5 roads:
 - Leave tree markings and unit boundary markings should be applied so as not to be visible from within 100 feet of these road(s).
 - Root wads and other debris should be removed or placed out of sight within 150 feet of key viewing points (*i.e.* scenic overlooks, heavily used trails) and these roads.
 - Stumps should be cut to within six inches of the ground in the immediate foreground when visible from key viewing points on these roads as terrain permits.
3. In cutting units, edges of stand boundaries and openings should be shaped and/or feathered where appropriate to avoid a shadowing effect. Openings should be oriented to contours and existing vegetation patterns to blend with the landscape's characteristics as appropriate.
4. In areas with visibility concerns, mowing or brush-hogging should be accomplished prior to herbicide application.

Scenery Resource Protection Along Authorized Trails

1. Temporary road and/or skid trails crossing authorized Forest trails should be kept to a minimum; any crossing should be perpendicular to authorized Forest Service trails.
2. Using segments of authorized Forest trails as skid trails or temporary road should be avoided.
 - a. If this cannot be avoided, rehabilitation of any affected trail segment will be required, and trail width should not be increased.
3. Character trees and trees that define authorized Forest trail corridor will be retained unless they pose a hazard.
4. When activities are implemented near any portion of an authorized Forest trail:
 - a. warning signs shall be placed on all access points for the affected trail
 - b. slash should be treated to an average of four feet from the ground within 100 feet of the corridor before a unit is accepted
5. If temporary closure of authorized Forest trail is required to safely conduct harvest operations, the trail tread should be cleared of all slash prior to re-opening the affected section for public use.
6. When practical, work should be scheduled outside of major recreation seasons.

DECISION RATIONALE

The St. Francis National Forest Ecosystem Restoration Project EA and its project planning record document the environmental analysis and conclusions on which I have based my decision to implement the Proposed Action.

The purpose of this project is to move the species composition, structure, and density of the St. Francis National Forest's major hardwood communities and associated native terrestrial and riparian vegetation communities closer to the desired conditions outlined in the 2005 Ozark-St. Francis National Forests Revised Land and Resources Management Plan (Forest Plan). The activities, monitoring requirements and design elements described on pages 1 through 12 of this decision document are needed, because current conditions will not support sustained oak dominance. The Proposed Action responds to the purpose of and need for action by 1) improving resilience against environmental stressors in mature and overstocked stands; 2) arresting the trend toward conversion from oak dominance to shade tolerant, non-mast bearing species, and 3) controlling the spread of invasive plant infestations. The Proposed Action was selected for implementation because it provides for resource outputs that can be maintained in perpetuity without harming land productivity. The environmental analysis shows this project provides for the protection of 1) heritage resources, 2) threatened, endangered and Regional Forester's sensitive listed species, 3) air quality, water quality, and soil productivity, 4) composition of the Turkey Ridge Research Natural Area, and 5) aesthetics in high-use areas. The Proposed Action also provides for control of invasive plant infestations while moving the project area closer toward desired conditions. At the end of this project, the Forest will still be dominated by mature stands of oak and other hardwoods, but the Forest will be better able to maintain function and recover following a disturbance event. If no action is taken at this time, the area will remain susceptible to a major loss event and will continue to move farther from the desired conditions outlined in the 2005 Forest Plan. Therefore, the benefits provided by the forest are more likely to be sustained for future generations under the Proposed Action than if current conditions and trends continue.

The Proposed Action will not result in significant or irreversible impacts to the human or natural environments. The treatment activities of the Proposed Action have all been implemented for years on this and other National Forests and the effects are well-known. This project is designed to prescribe site-specific treatments as inventories and other survey requirements are completed, ensuring they can be implemented in real time. The Proposed Action also includes adaptive activities 1) to ensure oak regeneration is established and able to thrive, and 2) to ensure treatments of invasive plant infestations are effective. What we learn will lead to more effective management prescriptions as we move through this project. Impact thresholds (*i.e.* triggers for changes in management) and the actions that would be triggered if those thresholds are met are established. Implementation thresholds have been set at levels that will allow for treatment of the entire project area over a 10-year time period while still providing for the ability to respond to disturbances in a timely manner. The direct, indirect and cumulative effects of implementing the Proposed Action have been analyzed with the assumption that the maximum implementation thresholds of each activity will be implemented annually for the duration of the project, ensuring predicted effects remain within the ranges of those analyzed.

The management activities of the Proposed Action are reasonable and feasible. Forest health and sustainability, invasive plant infestations, and wildlife habitat are land management issues that must be addressed at a landscape scale to yield meaningful results. It has been my experience that when restoration is the goal, planning on a landscape scale is more effective with respect to implementation and it provides for meeting multiple resource priorities and objectives simultaneously. Annual programs of work will be developed using an interdisciplinary approach with consideration of input from partners and will be refined through consultation with Native American tribes and the State Historic Preservation Officer.

From past experience, I know use of herbicide for timber stand improvement and site preparation activities has produced the desired outcome for previous projects on this National Forest; whereas use of manual, mechanical and burning treatments will result in re-sprouting of treated stems. The use of herbicide is necessary to control the size and spread of invasive plant species. Based upon the analysis conducted for this project, I find no apparently plausible basis for concern for human health and safety from the use of these herbicides as approved for this project. Manufacturer's label requirements, Forest Plan standards for Integrated Pest Management and other elements of the project's design mitigate the potential for impacts to human health, wildlife and the environment from herbicide use.

PUBLIC INVOLVEMENT

The St. Francis National Forest Ecosystem Restoration Project has been on the Ozark-St. Francis National Forests' Schedule of Proposed Actions (SOPA) since July 1, 2011 with periodic updates during the analysis.

The public was invited to review and comment on the proposal through scoping letters that were mailed and posted on the Ozark-St. Francis National Forests' website (2012 and 2016). No issues related to implementation of the proposal were raised in the responses that were received. On July 10, 2019, a notice of the draft EA's availability for review and comment was mailed to all who had provided scoping responses in 2012 and 2016. Notification was also provided to those who had expressed interest in this project, but did not comment, as well as to current Native American Tribal leaders with interest in projects on the St. Francis National Forest. The legal notice initiating a 30-day designated opportunity to comment on the draft EA was published in the newspaper of record, *The Helena World*, on July 19, 2019 and subsequently posted on the Ozark-St. Francis National Forests' website. A total of two responses were received during the 30-day comment period; one was a supportive comment and the other was an inquiry. Neither response identified a new issue that would drive development of a new action alternative or other changes to the Proposed Action. No new comments or information were submitted for the Responsible Officer's consideration after the close of the 30-day designated opportunity to comment on the draft EA.

All comments and expressions of interest in this project received since its listing on the Ozark-St. Francis National Forests' SOPA are part of the project's planning record. Lists of those to whom scoping notices were mailed in 2012 and in 2016 and a list of persons notified when the 30-day designated opportunity to comment began are also included in the project planning record. The

EA lists Native American Tribes, other agencies, non-government organizations, local officials and people consulted.

FINDINGS REQUIRED BY OTHER LAWS AND REGULATIONS

The actions of this project are consistent with the management goals, priorities, objectives and standards of the 2005 Forest Plan, and have been designed to comply with all applicable federal, state and local laws and regulations including, but not limited to, those discussed in this document and others such as the National Environmental Policy Act of 1969, the Multiple Use-Sustained Yield Act of 1960, the Clean Air Act, the Clean Water Act, and the Federal Insecticide, Fungicide and Rodenticide Act, and the following Executive Orders:

- **Executive Order 11988:** This order requires that federal activities generally avoid occupancy and modification of floodplains. The Proposed Action does not include actions that will modify floodplains or negatively affect floodplain functions or values. Locations of floodplains are known and are documented in the project planning record. (See EA pages 31, 36, 42, 43, 46 and 53, Appendix D)
- **Executive Order 11990:** EO 11990, Protection of wetlands, requires that federal activities generally avoid modification or destruction of wetlands. The Proposed Action complies with EO 11990 and will not modify or destroy wetlands. Locations of areas meeting criteria for designation as wetlands as outlined in the Clean Water Act are known and documented in the project planning record. (see EA pages 31, 42 and 46, Appendix D)
- **Executive Order 12898:** EO 12898 provides that “each federal agency shall make achieving environmental justice part of its mission by identifying and addressing as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations.” No adverse effects from the selected actions have been identified on minority or low-income populations. Implementation of the project is expected to affect all populations equally. (see EA page 34, Appendix D)
- **Executive Order 13112:** This order requires federal agencies to avoid actions that will spread invasive species unless the benefits of actions clearly out-weight the potential harm and all feasible and prudent measures to minimize risk of harm will be taken. The analysis shows the Proposed Actions are needed to comply with this order. (see EA pages 1-7, 13, 18, 20, 22, 23, 27, 28, 31, 32, 57-60, 63, 65-67, 70, 71, 83, Appendix B, Appendix D)

The National Forest Management Act (NFMA) directs the Secretary of Agriculture to establish certain resource management guidelines in the agency directives system. I find the actions of this project which alter vegetation comply with the seven requirements of NFMA [36 CFR 219.27(b)] by following the Forest-Wide and Management Area Standards and by adherence to the additional conditions for implementation of this project. The requirements met are as follows:

1. The activities chosen are suited for the multiple use goals of the area.

2. All practices prescribed for timber harvest areas will maintain adequate stocking for the area now and in the future.
3. These activities were not chosen because they provided the greatest dollar return or output of timber.
4. The activities chosen will not adversely affect residual trees in adjacent stands.
5. The activities chosen and implemented as described will avoid permanent impairment of site productivity and ensure conservation of soil and water resources.
6. The activities chosen are consistent with meeting Forest Plan objectives for multiple resources.
7. The activities are practical in terms of transportation and harvesting and total cost of logging and administration.

FINDING OF NO SIGNIFICANT IMPACT

CONTEXT

To provide for greater ecological relevance and efficiency of scale, this is a landscape level project involving approximately 22,675 acres of NFS lands within the administrative boundary of the St. Francis National Forest. Treatments will be implemented at smaller scales over no less than a 10-year period to incrementally affect changes to the landscape while minimizing the potential for negative effects to the human environment.

INTENSITY

Intensity refers to the severity or degree of impact (40 CFR 1508.27). The intensity of effects was considered in terms of the following:

1. **Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that, on balance, the effect will be beneficial.** Consideration of the intensity of environmental effects is not biased by beneficial effects of the action. Project activities are expected to result in an overall long-term beneficial effect due to increased structural diversity, increased biodiversity of understory vegetation, improved wildlife habitat, reduced hazardous fuel loads, and decreased invasive plant infestations that would occur in the project area. Beneficial and adverse effects are disclosed throughout the Environmental Consequences Section of the St. Francis National Forest Ecosystem Restoration EA, neither of which will result in a significant effect.
2. **The degree to which the Proposed Action affects public health or safety.** There will be no significant effects on public health and safety. The Proposed Action incorporates established measures to reduce the potential risks associated with the activities of this project and the effects analysis shows the risk to human safety are not significant. All aspects of herbicide use will be completed in compliance with Forest Plan requirements as well as with the manufacturers' label direction. To minimize impacts from smoke, all burning will be conducted in accordance with the State of Arkansas's Smoke

Management Program and will be coordinated through the Arkansas-Oklahoma Interagency Coordination Center. (EA pages 15, 16, 20, 21, 24, 25, 30-33, 43, 45-47, 49, 50, 51, 60, 66, 67, 72, 76, 78, 79, 80, 84, Appendix D, Appendix E)

3. **Unique characteristics of the geographic area, such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.** There will be no significant effects on unique characteristics of the area. There are no NFS acres designated as Wilderness Areas or proposed Wilderness Areas, no Special Interest Areas, no Wild and Scenic River Corridors, and no Inventoried Roadless Areas on the St. Francis National Forest. No existing land uses or hydrological features will be changed. The project's design ensures no adverse effects to wetlands, historic properties or cultural resources, or floodplains will occur. The project also includes actions to protect the Turkey Ridge Research Natural Area against infestation by invasive plants. (see EA pages 13, 15, 16, 21, 22, 23, 29, 31, 33, 34, 36, 42, 43, 46, 53, 62, 65, 77, 78, 84, Appendix C, Appendix D, SHPO Concurrence dated June 28, 2012.)
4. **The degree to which the effects on the quality of the human environment are likely to be highly controversial.** The effects on the quality of the human environment are not likely to be highly controversial. The environmental effects of planned activities are known and there is little controversy over the actual effects. The analysis of herbicide effects on the quality of the human environment are analyzed in detail in Human Health and Ecological Risk Assessments (RAs) and accompanying risk assessment worksheets prepared by Syracuse Environmental Research Associates, Incorporated. These RAs consider peer reviewed science that include long-term (chronic exposure) studies, and describe in narrative form the relative level of risk for human and ecological factors for a given application rate of the herbicide. 2005 Forest Plan standards and the Federal Insecticide, Fungicide and Rodenticide Act require herbicide applications be done in a manner consistent with and as specified on the herbicide label. Information on the herbicide label reflects the numerous scientific studies based in accepted, peer-reviewed science and regulatory reviews required by the US Environmental Protection Agency's herbicide registration (*i.e.* a license to market that pesticide in the United States) process. The analysis supports that use of herbicides as described for the Proposed Action poses no apparently plausible basis for concern to the human or natural environments. (EA pages 15, 16, 20, 21, 24, 25, 30-33, 43, 45-47, 49, 50, 51, 60, 66, 67, 72, 76, 78, 79, 80, 84, Appendix D, Appendix E)
5. **The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.** The analysis shows the effects are not uncertain, and do not involve unique or unknown risk. Because the Agency has considerable experience implementing these types of activities, the possible effects of this proposal are known. The analysis considers the maximum levels of action and shows effects are not uncertain and there are no unique or unknown risks. (EA pages 15, 16, 24, 25, 30, 31, 43, 45-47, 49, 50, 51, 60, 72, 78, 79, 84, Appendix D, Appendix E)
6. **The degree to which the action may establish a precedent for future actions with significant effects, or represents a decision in principle about a future consideration.** The action is not likely to establish a precedent for future actions with significant effects; implementing the project would not commit the Forest Service to actions on other lands

either within or outside the project area. No new projects are currently being developed within the area; environmental analyses will be completed for any future projects and decisions will be made on whether or not to implement them. None of the activities of this proposal are a major departure from types of activities now common to management of the Ozark-St. Francis National Forests. (See EA page 31, Appendix D, Appendix E)

7. **Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.** The analysis supports that the cumulative impacts associated with the Proposed Action are not significant. The analysis considers and discloses the effects of similar and connected actions related to this proposal. The EA also analyzes and discloses cumulative effects, including past, present and reasonably foreseeable actions on both private and public lands. (see EA pages 1, 31, 40, 44, 46, 51, 60, 68-73, 76, 78, Appendix D, Appendix E)
8. **The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed or eligible for listing, in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.** The action will have no significant adverse effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places; neither will it cause loss or destruction of significant scientific, cultural, or historical resources. The entire project area has been inventoried for heritage properties and the proposal has been designed so that all known historic properties that are or may be eligible for the National Register of Historic Places or are of undetermined eligibility will remain outside any ground disturbing activity unit and those containing elements that may be damaged by fire will be protected through avoidance during prescribed burning operations. Should any additional sites be found during project implementation, work will stop in the area of discovery and the appropriate authorities will be notified. The State Historic Preservation Office has provided a letter of concurrence for this project dated June 28, 2012. (see EA pages 21, 22, 25, 28, 31, 65, 77, 78)
9. **The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act (ESA) of 1973.** The action will not adversely affect any endangered or threatened species, because design elements are in place to protect federally-listed and Regional Forester's sensitive-listed species. There is no critical habitat as defined by the ESA on the St. Francis National Forest, so no adverse effects will occur. The effects findings for threatened and endangered species are summarized in the EA on pages 68-71. The Biological Assessment and Evaluation (BA/E) prepared for this project is part of the project planning record and contains the complete effects analyses for federally listed threatened and endangered species and impact findings for Regional Forester's sensitive listed species that are known to occur or have potential to occur on the St. Francis National Forest. The Forest Service submitted the BA/E to the U.S. Fish and Wildlife Service (USFWS) for review and concurrence. The USFWS responded that a written letter of concurrence with the effects determinations was not required for this action. Based on the BA/E and USFWS's response, there will be no significant direct, indirect or cumulative effects to any federally threatened or endangered species or any Regional Forester's sensitive listed species or their habitats when this action is implemented as described.

10. Whether the action threatens to violate Federal, State, or local law or requirements imposed for the protection of the environment. The action does not threaten to violate Federal, State, and local laws or requirements for the protection of the environment. Applicable laws and regulations were considered in the EA. The action is consistent with the 2005 Forest Plan. (EA pages 1, 3-6, 11, 13, 16, 18, 19-23, 25, 26, 28, 31-34, 38, 40, 43-45, 49, 51, 52, 58-63, 65, 67-72, 75, 76, 78-80, 83, 84, Appendix D, Appendix E)

After considering the environmental effects described in the EA and the project planning record, I have determined that these actions will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Therefore, an Environmental Impact Statement will not be prepared.

ADMINISTRATIVE REVIEW (OBJECTION) OPPORTUNITIES

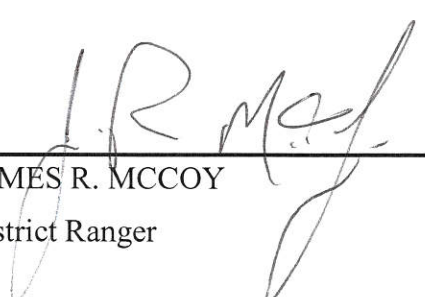
This decision was subject to objection pursuant to 36 CFR 218. A legal notice initiating the opportunity to object was published on October 9, 2019 in *The Helena World*. On October 2, 2019, letters were mailed to those who provided comments during the project's development to notify them the Draft Decision Notice/FONSI and Final Environmental Assessment for this project were available on the Ozark-St. Francis National Forests' planning website. No objections were filed during the 45-day objection filing period.

IMPLEMENTATION DATE

This decision may be implemented any time after the date of signature.

CONTACT

For additional information concerning this decision, contact: Jan Franks, Sylamore and St. Francis Ranger Districts NEPA Coordinator, Sylamore Ranger District, 1001 East Main Street, Mountain View, AR 72560, (870) 269-3228 extension 3234.


JAMES R. MCCOY
District Ranger

3-Dec-19

Date

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